

Mobilogix BTM-150-B iBeacon Modules



- Proximity tracking for sales/service personnel
- Smart sensors and collectors
- Asset location and management
- Marketing and advertising
- 8-year battery life

Product Highlights

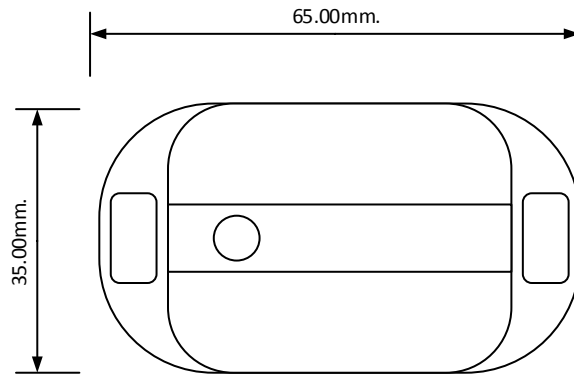
The BTM-150-B module is designed to allow consumers, technicians and other user groups to quickly and easily attach their Bluetooth enabled smart devices to deployed assets in corporate and retail locations for advertising and indoor location-based services. This member of the BTM product family leverages Atmel's Bluetooth® SMART (BLE 4.1) System on a Chip integrated with ARM® Cortex-M0 32-bit processor. allowing customer applications to be hosted directly by the module without the need for external processors.

The BTM-150-B offers seamless proximity services for iOS, Android, and BLE enabled devices. The low-cost technology coupled with extended battery life enables a host of new internal and consumer facing capabilities.

Modules in the Mobilogix BTM product family can be customized to meet specific needs of a wide variety of monitoring and data collection applications.



Technical Specifications



Bluetooth

Version	BLE SMART 4.1
Frequency	2.402 GHz to 2.480 GHz
Transmit Power	-20 to +0dBm programmable
Receiver Sensitivity	-95dBm/-93 dBm programmable
Range	200 meters (line of sight)
Antenna	integrated
Broadcast Channels	3 (configurable)
Advertising Interval	100ms (configurable)
Parameters	Configurable UUID, Major, Minor
Memory	128kB embedded RAM and ROM
Processor	26MHz Cortex-M0
Security	AES-128b and SHA-256b

Electrical

Operating Voltage	1.8 - 4.3 VDC
Power	900nA sleep 3mA peak TX (3.6V, 0dBm) 4.0mA peak RX (3.6V, -93dBm) 9.7µ average advertisement

Battery

3V, CR2450 Lithium

Brownout detector and power on reset

Watchdog Timer

Temperature

Operational	-40°C - +85°C
Storage	-40°C - +85°C

Certifications

Complies with Bluetooth V4.1, ETSI EN 300 328 and EN 300 440 Class 2, FCC CFR47 Part 15 and ARIB STD-T66

Dimensions

L: 65.0mm
W: 35.0mm
H: 12.2mm

Warranty

Device	1 year parts & labor
Battery	8 years (based on advertising configuration)

Instructions to the User

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

FCC ID: 2AH4HBTM150B

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE TO THE USER FOR RF EXPOSURE FCC/IC CERTIFICATION Caution: Exposure to Radio Frequency Radiation. The device shall be used in such a manner that the potential for human contact during normal operation is minimized. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 5mm between the radiator and your body.

Instructions pour l'utilisateur

Cet équipement a été testé et jugé conforme aux limites d'un appareil numérique de classe B, conformément à la partie 15 des règles de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre une énergie de radiofréquence et si non installé et utilisé conformément aux instructions, il peut causer des interférences nuisibles aux communications radio. Cependant, il n'y a aucune garantie que l'interférence ne se produira pas dans une installation particulière. Si cet appareil provoque des interférences nuisibles à la réception radio ou de télévision, ce qui peut être déterminé en mettant l'appareil hors tension, l'utilisateur est invité à essayer de corriger l'interférence par une ou plusieurs des mesures suivantes:

Réorienter ou déplacer l'antenne de réception.

Augmenter la distance entre l'équipement et le récepteur.

Branchez l'appareil dans une prise sur un circuit différent de celui auquel le récepteur est connecté.

Consulter le revendeur ou un technicien radio / TV expérimenté.

Afin de maintenir la conformité aux règlements de la FCC, des câbles blindés doivent être utilisés avec cet équipement. Fonctionnement avec équipement non approuvé ou des câbles non blindés est susceptible de provoquer des interférences dans la réception radio et télévision. L'utilisateur est averti que les changements et les modifications apportées à l'équipement sans l'approbation du fabricant peut annuler le droit de l'utilisateur à utiliser cet équipement.

AVIS À L'UTILISATEUR DE RF EXPOSITION FCC / IC CERTIFICATION Attention: Exposition aux radiations de fréquence radio. Le dispositif doit être utilisé de telle sorte que le contact humain potentiel pendant le fonctionnement normal soit minimisé. Cet équipement est conforme aux limites FCC d'exposition aux radiations définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20cm entre le radiateur et votre corps.

